

## ABSTRACT OF THE DISCLOSURE

The present invention relates to an ionization source having a chamber for ionizing a sample. The ionization chamber has surfaces to reduce the overall

- 5 interaction with reactive samples. The inner surface walls of the ionization chamber or the ionization chamber may be formed from an inert super alloy. For instance, Inconel™ 625, Inconel™ 601 or Hastelloy® may comprise the ionization chamber or the surface walls of the ionization chamber. The invention also includes a method for reducing the interaction of a reactive analyte with an ion source.